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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,410	06/20/2002	Jiri Babej	60174-026	8965
32361	7590	09/30/2005		
GREENBERG TRAUIG, LLP MET LIFE BUILDING 200 PARK AVENUE NEW YORK, NY 10166			EXAMINER MITCHELL, KATHERINE W	
			ART UNIT 3677	PAPER NUMBER

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/030,410

Applicant(s)

BABEJ, JIRI

Examiner

Katherine W. Mitchell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 7/22/ and 8/25/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 24-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

The request filed on 7/22/2005 for a Request for Continuing Examination (RCE) under 37 CFR 1.114 is acceptable and an RCE has been established. Any previous finality is hereby withdrawn and a new action on the merits follows. Any newly-submitted claims have been added. An action on the RCE follows.

### ***Specification***

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Drawings***

2. The drawings objected have been withdrawn in view of applicant's explanations.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(f) he did not himself invent the subject matter sought to be patented.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 24 –29 and 33-37 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. Priority document DE 10033149 does not list the sole inventor of the instant application as an inventor. However, Figure 11 shows the element of claim 24, and “426” described as showing the conical inner cutting edge, which examiner has noted is not apparent in the pending figures. The rounded outer edge and conical inner edge are shown (Fig 11). The tubular inner surface of the head is shown (Fig 1 and 15) The head with a longitudinal dimension is shown (Fig 1). The hollow shaft is shown (Fig 10). A threaded outer shaft is shown (Fig 19 and 20). NOTE that this can be overcome with an affidavit attesting to the error in inventorship.

6. Claims 24-40 are rejected under 35 U.S.C. 102(b) as anticipated by Muller USP 4633560 or, in the alternative, under 35 U.S.C. 103(a) as obvious over Muller in view of Danino EPO 0028019

Re claims 24 and 33: Muller teaches a functional element consisting of a shaft part (10) and a head part (30) axially aligned with the shaft and forming a hollow tubular wall capable of forming a riveting joint with a panel element. The shaft part defines a shaft diameter and said tubular wall defines an outer wall diameter substantially the same as said shaft diameter, as shown in Figs. 1 and 3 and 27-29. Examiner notes that substantially is a broad term. (In re Nehrenberg CCPA) 126 USPQ 383). The head part includes a distal end defining an outer edge rounded (49) and an inner edge

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defining a cutting surface (47) remote from said shaft part in the abstract and col 8 lines 3-35 and Fig 1, capable for riveting to a panel element (col 7 lines 41-50). The head part is hollow (Fig 1).

Examiner believes "substantially the same as said shaft diameter" is taught by Muller, but if it is held that it is not taught, Danino teaches a functional element (blind nut 1) with a shaft and head of substantially the same diameter in the abstract, Figs 1-3, and the last paragraph of page 2. The first paragraph on page 2, which actually begins on page 1, teaches that the flange is wasteful in material and requires an additional manufacturing step, both of which add time and costs to the element, and thus the head and shaft the same size would minimize these costs. In addition, a change in size would have been an obvious matter of design choice to change the shaft size to more closely match the head size, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). This change would allow a larger and beefier shaft to be used, which would be practical especially in light of new stronger and less dense materials which would not require a large joint area or flange for support.

Further Re claim 33: Muller teaches in Figs 27-29 the head part forming a rivet flangeless interface with said shaft part. Note that applicant also has a small step at the interface, and the small step at the interface does not meet the definition of a flange:

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**flange** (flănj) *noun*

A protruding rim, edge, rib, or collar, as on a wheel or a pipe shaft, used to strengthen an object, hold it in place, or attach it to another object. <sup>1</sup>

Again, examiner believes Muller meets the definition of a flangeless interface between shaft and head. If it is held that this limitation is not met, Danino teaches a flangeless interface in Figs 1-3, the first paragraph on page 2, (which actually begins on page 1,) and the last paragraph on page 2, that the flange is wasteful in material and requires an additional manufacturing step, both of which add time and costs to the element.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Muller and Danino before him at the time the invention was made, to modify Muller as taught by Danino to include a flangeless intersection, in order to obtain a savings in material and manufacturing costs, as taught/suggested by Danino on page 2.

Re claims 26 and 34: Muller Figs 3 and 7 best show the inner surface of the head having a substantially tubular shape.

Re claim 27 and 35: The head part includes a longitudinal dimension for forming an annular fold (Muller Fig. 11 and 14). The annular fold and thickness are not positively recited, and the longitudinal dimension **is capable of being** of sufficient length to form some size of an annular fold and include some sheet thickness and a length of a rivet flange.

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<sup>1</sup>Excerpted from *The American Heritage Dictionary of the English Language, Third Edition* Copyright © 1992 by Houghton Mifflin Company. Electronic version licensed from Lernout & Hauspie Speech Products N.V., further reproduction and distribution restricted in accordance with the Copyright Law of the United States. All rights reserved.

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Re claims 29 and 37: Muller Figs 1-3 show a threaded outer surface of the shaft.

Re claims 28 and 30 and 36 and 38: Muller Fig 27 shows a hollow shaft portion having inner threads.

Re claims 31-32 and 39-40: The methods of forming the device are not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight, as Muller's fastener is capable of these limitations.

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller or Muller in view of Danino as applied above, and further in view of Mauer et al USP 6338601. As discussed above, Muller or Muller in view of Danino teaches all the elements except that the inner edge of the element defines a conical cutting surface. Mauer teaches a punch rivet having a conical inner face (4) on the distal end of the rivet shank in the abstract and Figures. Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Muller, or Muller in view of Danino, and Mauer before him at the time the invention was made, to modify Muller, or Muller in view of Danino, as taught by Mauer to include an inner edge defining a conical cutting surface, in order to obtain a sharp cutting edge with optimal piercing abilities. One would have been motivated to make such a combination because a clean cut would have been obtained, as it is well known that conical points are commonly used in cutting and drilling applications.

#### ***Response to Arguments***

8. Applicant's arguments with respect to claims 24-40, filed May 13, 2005 have been fully considered but they are not persuasive.

9. Regarding the 102(f) rejection, **examiner encourages applicant to file an Affidavit attesting to the improper printing of the German patent, and it will be considered and most likely accepted as overcoming the rejection.**

10. Regarding the rejection of claim 24, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the tubular element wall is sufficiently thin to produce an annular fold and still strong enough to pierce through a sheet metal part). are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). A cutting surface does not structurally support the argument, as the panel element can be Styrofoam insulation sheets or a very thin metal panel such as is used in space.

11. Examiner does not see anything in the specification that would support an amendment specifying the properties of the panel that is cut or the properties of the cutting edge, but those are the type of limitations needed, in examiner's opinion.

12. Applicant is encouraged to carefully review USP 4039099, especially Fig 7-8, and 3686914, (both previously cited) showing annular folds. Note that, see claim 27 rejection above, **as claimed**, the folds are not positively recited and do not have to extend substantially parallel to the panel or perpendicular to the shaft axis, and can be the annular fold formed by the tip end of the rivet (4039099 Fig 7-8). Examiner believes, subject to a further search, that claim 27, in independent form, and worded to overcome these two references and positively recite the annular fold and thickness such



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that the head part, in a longitudinal dimension, **forms** an annular fold and is of sufficient length to also include the lengths of the sheet thickness and the rivet flange (wording would need to be perfected) is likely to be allowable.

**Conclusion**

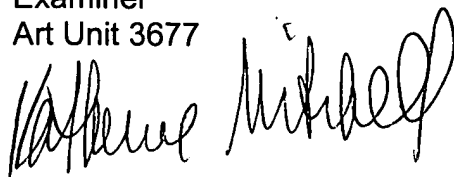
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 571-272-7069. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katherine W Mitchell  
Examiner  
Art Unit 3677



Kwm  
9/27/2005